

WHAT IS CLAIMED IS:

1. A system for cooling a processor, the system comprising:
a heat sink assembly having a fan and an air channel, the heat sink assembly configured to be thermally coupled to the processor; and
a heat sink lid coupled to the heat sink assembly, wherein the heat sink lid is configured to leave a portion of the air channel uncovered.
2. The system of claim 1, further comprising a thermal adhesive disposed on an outer surface of the heat sink assembly for thermally coupling the heat sink assembly to the processor.
3. The system of claim 1, wherein the heat sink lid is configured to reduce air flow noise in the system during operation.
4. The system of claim 3, wherein the heat sink lid is configured to reduce air flow noise by preventing the formation of a standing wave within the air channel.
5. The system of claim 4, wherein the heat sink lid prevents the formation of the standing wave by preventing the reflection of an incident wave propagating within the air channel.
6. The system of claim 3, wherein the heat sink lid includes an edge configured to reduce turbulent flow of air escaping from the air channel and flowing across the edge.

7. The system of claim 6, wherein the edge is substantially perpendicular to a direction of air flow within the air channel.
8. The system of claim 1, wherein the processor comprises a graphics processing unit.
9. The system of claim 1, wherein the processor comprises a central processing unit.
10. The system of claim 1, wherein the processor comprises an application-specific integrated circuit.
11. A heat sink lid configured to couple to a heat sink assembly that is thermally coupled to a processor, the heat sink lid adapted to leave a portion of an air channel in the heat sink assembly uncovered.
12. The heat sink lid of claim 11, wherein the heat sink lid is configured to reduce air flow noise when the heat sink assembly operates to cool the processor.
13. The heat sink lid of claim 12, wherein the heat sink lid is configured to reduce air flow noise by preventing the formation of a standing wave within an air channel of the heat sink assembly.

14. The heat sink lid of claim 13, wherein the heat sink lid prevents the formation of the standing wave by preventing the reflection of an incident wave propagating within the air channel.

15. The heat sink lid of claim 11, wherein the heat sink lid includes an edge configured to reduce turbulent flow of air escaping from the air channel and flowing across the edge.

16. The system of claim 15, wherein the edge is substantially perpendicular to a direction of air flow within the air channel.